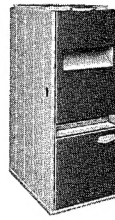


bryant

GAS FIRED UPFLOW FURNACE



**Product
Data
Sheet** **394U**
Size 80
Series B

PDS 394U.80.2 4/25/67

CLEARANCES FROM COMBUSTIBLES

In "large" rooms

- 6" from casing & vent hood
- 1" from sides & top of supply plenum

In confined spaces

- 0" from casing sides, rear & bottom
- 6" from casing front & type C vent connector
- 3" from top & sides of uninsulated supply plenum

SHIPPING WEIGHT

160 lbs.

STANDARD GAS CONTROL OPTIONS

| Control Type | Gas | |
|--------------|------|---|
| D2 | LPG | 100% shut-off automatic pilot; Bryant diaphragm valve; transformer. |
| D4 | City | Bryant diaphragm valve; Bryant automatic pilot; gas pressure regulator; transformer. |
| D5 | City | 100% shut-off for natural gas. Same as D4 except uses thermocouple pilot and pilot relay. |

HEATING RATINGS AND CAPACITIES

| Rating ¹ | Input ² | BTUH | 80,000 ³ |
|---------------------|--------------------|------|---------------------|
| | Output | BTUH | 64,000 |

¹Ratings are for elevations up to 2000 ft.; for higher altitudes, reduce ratings 4% for each 1000 ft. above sea level.

²20% reduction in input allowed.

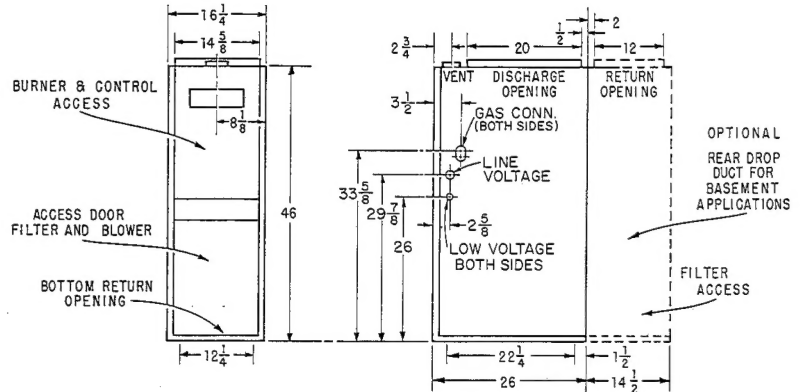
³For LP Gas, model designated 80-V-394, A.G.A. Input 75,000, Output 60,000.

COMPONENT INFORMATION

| | |
|---------------------------|-------------------|
| Motor—Type L or M—4 Speed | 1/2 HP (Sh. Pole) |
| Power Supply | 120-60-1 |
| Full Load Amps | 6.3 |
| Speed & Rotation | 1050 CCW* |
| Motor—Type E—4 Speed | 1/4 HP (PSC) |
| Power Supply | 120-60-1 |
| Full Load Amps | 5.4 |
| Speed & Rotation | 1075 CCW* |
| Blower Wheel Dia. & Width | 10" x 6" |
| Bore—Direct Drive | 1/2" |
| Filter—Fiberglass** | |
| Inlet At Bottom | 14" x 25" x 1" |
| External Filter Rack | 14" x 25" x 1" |
| Internal Side Filter | 14" x 25" x 1" |
| Rear Drop Duct | 14" x 25" x 1" |

*Rotation viewed from end opposite shaft

**Use multi-velocity filters above 875 CFM



DRIVE TYPES

- L—Multi-speed direct drive heating—minimum cooling
- M—Multi-speed direct drive heating—minimum cooling with evaporator blower motor relay
- E—Multi-speed direct drive heating—maximum cooling with evaporator blower motor relay

CONNECTIONS

| | |
|-------------------------------|-----------------------|
| Gas Supply NPT Natural Gas | 1/2" |
| Propane | 3/4" |
| Electric Supply—Direct Drive | 120-60-1 |
| Branch Circuit Wire Size | AWG 14 |
| Fuse Size | AMPS 15 |
| Control Circuit Power Avail.* | |
| Type L | KA 10.8 |
| Type M or E | 7.2 |
| Flue Size | 4 (Oval) |
| Duct—Inlet at bottom | D x W 22 1/4 x 12 1/4 |
| Inlet ext. filter rack | H x W 12 x 23 |
| Inlet drop duct | D x W 12 x 14 1/2 |
| Discharge | D x W 20 x 14 1/2 |

*External to unit

CONTROL INFORMATION

| | |
|-------------------------------|------------------------|
| Burners (Steel Slotted Port) | 3 |
| Orifice Drill Size Prop. | 54 |
| Nat. | 40 |
| D2 Control (Prop.) Regulator | None Required |
| Valve | 1/2 A641 |
| Escapement Orifice Drill Size | 80 |
| Pilot—MH Q314A | .011 Orifice |
| D4 Control (Nat.) Regulator | Comb. Thermac 1/2 VR-1 |
| Valve | 1/2 A641 |
| Escapement Orifice Drill Size | 80 |
| Pilot—732 | .016 Orifice |
| D5 Control (Nat.) Regulator | Comb. Thermac 1/2 VR-1 |
| Valve | 1/2 A641 |
| Escapement Orifice Drill Size | 80 |
| Pilot—MH Q314A | .018 Orifice |

Manual Shut-off Cock and Pilot Cock are standard equipment. Supplied as separate parts except where included as integral part of the combination regulator.

AIR FLOW FOR INDICATED AIR TEMPERATURE RISE*

| TEMP RISE °F | 70 | 75 | 80 | 85 | 90 | 95 | 100 |
|--------------|-----|-----|-----|-----|-----|-----|-----|
| AIR FLOW CFM | 795 | 741 | 695 | 654 | 618 | 585 | 556 |

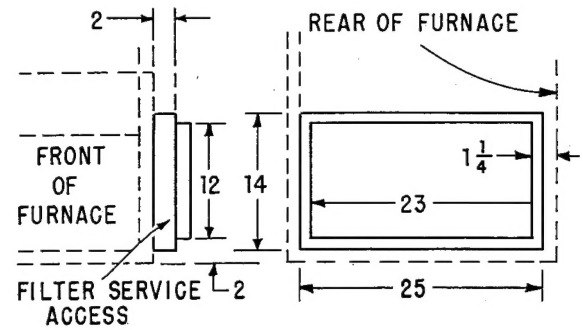
*At Rated Input

AIR DELIVERY PERFORMANCE†

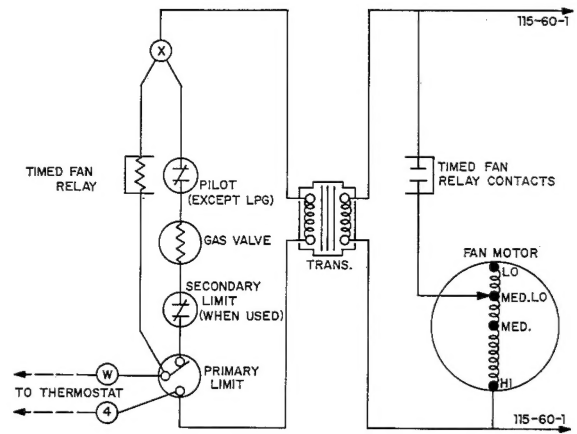
| Air Delivery CFM | EXTERNAL STATIC PRESSURE AVAILABLE | | | | | | | |
|------------------------|------------------------------------|-----|--------|-----|--------------|-----|--------|-----|
| | Type L or M Motor | | | | Type E Motor | | | |
| | Hi | Med | Med-Lo | Lo | Hi | Med | Med-Lo | Lo |
| 500 | .88 | .78 | .70 | .58 | | | | .77 |
| 600 | .76 | .65 | .52 | .06 | | | | .61 |
| 700 | .63 | .47 | | | | | .78 | .27 |
| 800 | .48 | | | | | | .60 | |
| 900 | .16 | | | | | .74 | .33 | |
| 1000 | | | | | .76 | .58 | | |
| 1100 | | | | | .63 | .38 | | |
| 1200 | | | | | .46 | .14 | | |
| 1300 | | | | | .27 | | | |
| 1400 | | | | | .07 | | | |

Above data gives Cfm under typical field applications (i.e. 125 volts).

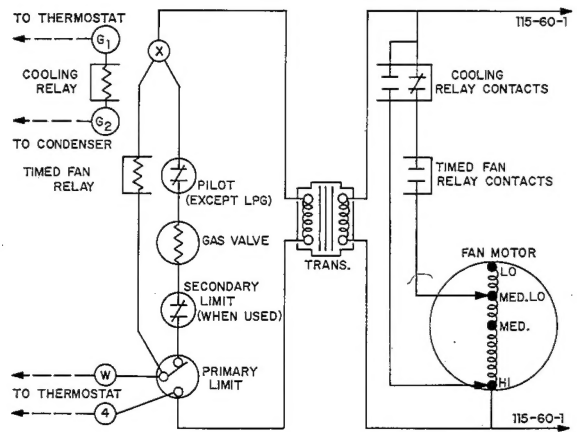
Optional External Filter Rack Mounts on Either Side



LINE-TO-LINE SCHEMATIC UNIT WIRING DIAGRAMS



Type L



Types M or E